

[0059] It is noted that a single sound board **900** can handle multiple objects. In addition, the present invention allows each user to have a local copy of shared objects **1170** (unlike token based system). Generally, the present invention allows users to send commands to manipulate objects. These commands are serialized and distributed by the sound board **900** using a broadcast mechanism. This allows each user to keep a local copy of the shared object and to manipulate the shared object locally.

[0060] In the exemplary implementation, even the action creator (user **1** in **FIG. 11**) will receive the command via the sound board **900** almost at the same time as all of the other users. Thus, changes on the screen caused by the command will happen at about the same time for all users.

[0061] **FIG. 12** illustrates a document **1200** that has been modified in accordance with the present invention. As shown in **FIG. 12**, the document **1200** is comprised of a base document and a number of overlays **1210**, **1220** comprising additions or modifications to the base document. The overlays **1210**, **1220** are each stored as separate events in the addendum database **420**. As previously indicated, when a given document is requested, the active client agent **510** associated with the requesting team member accesses the input document in the document database **175** and any corresponding modifications **1210**, **1220**, **1230** contained in the addendum database **420** for delivery to the client software **480** on the client terminal **470** of the requesting team member.

[0062] **FIG. 13** illustrates an application of the present invention in a manufacturing environment. In the example of **FIG. 13**, the "input documents" comprise constituent basic parts **1331** that may be used to generate intermediate parts **1332** and a final product **1333**. Each are connecting the input, intermediate and output parts **1331**, **1332**, **1333** in **FIG. 13** are tasks.

[0063] **FIG. 14** illustrates an application of the present invention in a publishing environment. As shown in **FIG. 14**, the input documents **140** comprise an input specification document **1441**, that are modified to generate one or more intermediate drafts **1442**, **1443** before the final print **1444** is generated.

[0064] **FIG. 15** illustrates an application of the present invention in an education and presentation environment. As shown in **FIG. 15**, the input documents **110** comprise materials **1551** covering a small subject area, intermediate documents **1552** for larger portions and then the course material **1553** for an entire course is generated. An instructor can use the course material **1553** to generate one or more course reports **1554**.

[0065] It is to be understood that the embodiments and variations shown and described herein are merely illustrative of the principles of this invention and that various modifications may be implemented by those skilled in the art without departing from the scope and spirit of the invention.

I claim:

1. A network collaboration system, comprising:

one or more input documents;

one or more network connections that receive contributions to the input documents from one or more clients,

wherein the contributions combined with the respective input document creates one or more output documents; and

a collaboration process that permits one or more of the clients to switch between a synchronous and an asynchronous collaboration session.

2. The system of claim 1, wherein the switching occurs when one of the clients in an asynchronous collaboration session invites one or more new clients to a synchronous collaboration session.

3. The system of claim 1, wherein the switching occurs when two or more of the clients coordinate to start a synchronous collaboration.

4. The system of claim 1, wherein one or more of the clients resume a suspended synchronous collaboration.

5. The system of claim 1, wherein the switching occurs when all of said clients leave the session.

6. The system of claim 1, wherein the switching occurs when all of said clients switch the session to an asynchronous session

7. The system of claim 1, wherein the collaboration process provides a synchronous collaboration component as an incremental addition to an asynchronous collaboration component.

8. The system of claim 7, where the incremental addition intercepts a contribution event from a client and broadcasts the intercepted contribution events to other clients.

9. The system of claim 1, wherein the collaboration process implements the contributions to the input documents based on a time of arrival.

10. The system of claim 1, wherein the collaboration process implements the contributions to the input documents based on a global time stamp.

11. The system of claim 1, wherein the collaboration process provides a consistent view of said one or more documents to each of said clients.

12. The system of claim 1, wherein the collaboration process broadcasts the contributions to the input documents to each of said clients.

13. The system of claim 1, where the contributions comprise at least one of a comment, a change request and an incremental modification of a document.

14. A method comprising the steps of:

receiving contributions to one or more input documents from one or more clients over a network;

combining the contributions with the respective input documents to create one or more output documents; and

switching one or more of the clients between a synchronous and an asynchronous collaboration session to make said contributions to one or more input documents.

15. The method of claim 14, wherein the switching step occurs when one of the clients in an asynchronous collaboration session invites one or more new clients to a synchronous collaboration session.

16. The method of claim 14, wherein the switching step occurs when two or more of the clients coordinate to start a synchronous collaboration.

17. The method of claim 14, wherein one or more of the clients resume a suspended synchronous collaboration.